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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte SAMUEL T. BARONE, JR., DRAKE SMITH, DAVID DAVIS,
and THOMAS STONE

———————

Appeal 2008-5480
Application 09/840,497
Technology Center 2600

———————

Decided[1]: February 20, 2009

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Before MAHSHID D. SAADAT, ROBERT E. NAPPI, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from a final rejection of
claims 1-30.[2] We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

———————

STATEMENT OF CASE

Appellants' claimed invention is an interactive television (ITV) system and method that includes an ITV data source 14 that provides ITV data and closed caption (CC) data source 12 (Fig. 1) that provides CC data for electronically merging ITV and CC data (Spec. 1:12-15) .

Independent claims 1 and 12, reproduced below, are representative of the subject matter on appeal.

1. An interactive television (ITV) system comprising:

a first input for receiving a first data stream for a particular television program;

a second input for receiving a second data stream for the particular television program, the first data stream having a higher priority than the second data stream; and

a processing unit coupled to the first input and the second input, characterized in that the processing unit creates a gap in the first data stream for inserting at least a portion of data carried by the second data stream, the gap being selected in a location in the first data stream so as to allow the data carried by the second stream to be effectively displayed without disrupting display of data carried by the first data stream.

12. An interactive television system including:

a first input for receiving a first data stream having a plurality of first data units;

a second input for receiving a second data stream having a plurality of second data units; and

a processing unit coupled to the first input and the second input, the processing unit including logic for:

identifying time slots of a television signal assigned to
the plurality of first data units in the first data stream;

reassigning a portion of the plurality of first data units
assigned to particular time slots to earlier time slots; and

assigning at least a portion of the plurality of second data
units in the second data stream to the particular time
slots.

REFERENCES

Landis	US 5,428,400	Jun. 27, 1995
Bauchot	US 6,141,336	Oct. 31, 2000
		(filed Nov. 13, 1997)
Bertram	US 20202/0064177A1	May 30, 2002
		(filed Jul. 31, 1998)
Feinleib	US 6,637,032 B1	Oct. 21, 2003
		(filed Jan. 6, 1997)

The Examiner rejected claims 1-10 and 17-22 under 35 U.S.C.
§ 103(a) based upon the teachings of Bertram and Feinleib.

The Examiner rejected claims 11 and 23 under 35 U.S.C. § 103(a)
based upon the teachings of Bertram, Feinleib, and Landis.

The Examiner rejected claims 12 and 24 under 35 U.S.C. § 103(a)
based upon the teachings of Bertram and Bauchot.

The Examiner rejected claims 13-15 and 25-27 under 35 U.S.C.
§ 103(a) based upon the teachings of Bertram, Bauchot, and Feinleib.

The Examiner rejected claim 16 under 35 U.S.C. § 103(a) based upon
the teachings of Bertram, Bauchot, Feinleib, and Landis.

The Examiner rejected claim 28 under 35 U.S.C. § 103(a) based upon
the teachings of Bertram, Bauchot, and Landis.

Appellants contend Bertram, alone or in combination with Feinleib, fails to teach or suggest first and second transport streams multiplexed together are for the same particular television show (App. Br. 8; Reply Br. 2).

<div align="center">ISSUE</div>

Did Appellants establish the Examiner erred by rejecting the claims under 35 U.S.C. § 103(a) over the MPEG transport stream of Bertram, which teaches each transport stream is associated with a different program, in view of the closed caption synchronization taught by Feinleib?

<div align="center">FINDINGS OF FACT</div>

1.   Appellants' invention is an ITV for a particular television program that includes ITV data and closed caption (CC) data, the CC data having a higher priority (Fig. 1; Spec. 2:27-28; App. Br. 5).

2.   Bertram teaches forming and processing an MPEG transport stream where programs are inserted into or deleted from an MPEG transport stream (Abstract; ¶[0001]). The transport stream includes multiple programs (denoted as P1, P2, and P3 in Fig. 1). The transport stream includes a plurality of substantially fixed length data packets each used for "alternatingly different programs." ¶[0024].

3.   The relative position of each packet associated with a particular program remains the same with respect to the other packets in the program as long as modifications to another program do not affect the relative position of the packets in the one program. ¶[0025]

4.   If a received packet is not a NULL packet, the received packet is coupled to an output as part of an output transport stream. If the received

<div align="center">4</div>

packet is a NULL packet, and if a replacement packet is to be inserted into the output stream, then the replacement packet is coupled to the output as part of the output stream rather than the NULL packet (¶[0038]). Other types of information streams may be used (¶[0057]).

     5.   Feinleib teaches synchronizing enhancing content with a video program using closed captioning (Abstract; col. 4, ll. 24-29). Specifically, Feinleib synchronizes enhancing content with primary content using the closed captioning script of the primary content. Thus, enhancements to the primary content are timely introduced at preselected phrases or raw data strings of the closed captioning script, and hence, at desired junctures of the primary content (col. 2, ll. 13-20). Feinleib "takes advantage of the closed captioning script as the timing mechanism for synchronizing introduction of the enhancing content relative to the primary content." (Col. 6, ll. 26-29).

     6.   Bauchot teaches exchanging data between an asynchronous (ATM) network and a synchronous network (Abstract; col. 1, ll. 10-14). A master scheduler compiles various information to determine how the time slots of each time frame are allocated to associated mobile terminals (col. 5, ll. 32-36).

PRINCIPLES OF LAW

     In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (Fed. Cir. 1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other

ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If the Examiner's burden is met, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *Id.*

ANALYSIS

Claims 1-10 and 17-22

The Examiner rejected claims 1-10 and 17-22 over the combination of Bertram and Feinleib under 35 U.S.C. § 103(a). Appellants group independent claims 1, 5, and 17 together in their arguments (App. Br. 7). We address this rejection with respect to representative claim 1.

Claim 1 recites an ITV system including a first input receiving a first data stream for a particular television program and a second input receiving a second data stream for the particular television program, and creating a gap in the first data stream for inserting at least a portion of the data carried by the second data stream. The Examiner finds Bertram teaches all of the features recited in claim 1 except that Bertram "fails to disclose that the first and second data stream [sic] are for a particular television program" (Ans. 5). The Examiner then finds Feinleib "explicitly discloses a first data stream (primary content, main program that supports closed captioning—column 4, lines 15-22) and a second data stream (enhancing/interactive content used to enhance the primary content—column 5, lines 25-35) for a particular television program (primary content, main program—column 5, lines 45-56)" (Ans.5). The Examiner also finds Bertram discloses replacing a NULL packet to form a gap for inserting a desired replacement packet (Ans. 15).

Thus, it would have been obvious to modify Bertram's system to include first and second data streams for a particular television program as taught by Feinleib.

Appellants contend Bertram teaches a transport multiplexer that does not remove NULL packets to create gaps, as alleged by the Examiner; rather, as a multiplexer, if the received packet is not a NULL packet, it is coupled to an output as part of an output transport stream. If the received packet is a NULL packet, then a replacement packet is coupled to the output as part of the output stream (FF 4; Bertram ¶[0038]; Reply Br. 2). Further, Appellants argue, if the transport multiplexer were to actually create a gap, the established timing and distance relationships of the packets would be altered (App. Br. 8), which is contrary to Bertram's teachings (Bertram ¶[0038]; FF 4).

Appellants additionally assert that even if Bertram were able to create a gap in the first data stream, each transport stream in Bertram is associated with a different program and not of the same (particular) television program, as recited in the claims. Thus, in Bertram, the transport stream merges transport packet streams of different programs (App. Br. 8-9; FF 2). Further, Appellants argue, because Bertram's system already allows the use of enhancing content to enhance a particular television program, modifying Bertram using Feinleib, as proposed by the Examiner, does nothing to make the use or transportation of enhancing data more efficient (App. Br. 9-10).

Reviewing Bertram, particularly paragraph [0038], Bertram does not "clearly" teach the creation of a gap in the first data stream for a particular television program for inserting at least a portion of data carried by the second data stream for the particular television program, as found by the

Examiner (Ans. 15). In a multiplexer system such as Bertram's, the NULL packet in the data stream is not removed; rather it is coupled to the replacement data packet as asserted by Appellants. Feinleib merely teaches there is primary content and enhanced content, the enhanced content being introduced at a desired junction (FF 5).

The Examiner has not provided a prima facie case of obviousness with respect to claim 1 because Bertram teaches merging transport packet streams of different programs rather than of the same program as taught by claim 1. Thus, combining Bertram with Feinleib does not cure the deficiencies of Bertram. Therefore, the Examiner's rejection of claims 1, 5, and 17, as well as of dependent claims 2-4, 6-10 and 18-22, as obvious over Bertram and Feinleib is not sustained.

Claims 11 and 23

The Examiner rejected claims 11 and 23 under 35 U.S.C. § 103(a) based upon the teachings of Bertram, Feinleib, and Landis. Since Landis does not cure the defects of Bertram and Feinleib as set forth above, then the rejection of claims 11 and 23 as obvious over the collective teachings of these references cannot be sustained.

Claims 12 and 24

The Examiner rejected claims 12 and 24 under 35 U.S.C. § 103(a) based upon the teachings of Bertram and Bauchot. We address this rejection with respect to independent claim 12, as independent claim 24 is similar in scope to claim 24 and these claims were argued together (App. Br. 10; Reply Br. 3).

Claim 12 recites an ITV system that includes first and second data units for transmitting a television signal where time slots in the television

signal are identified and assigned to first data units in the first data stream. A portion of the first data units assigned to particular time slots are reassigned to earlier time slots, and a portion of the second data units are assigned to the particular time slots.

The Examiner finds Bauchot teaches manipulating data units assigned to particular time slots in data streams (Ans. 17). The plurality of data units reassigned to earlier time slots in Bauchot could be independent program packets. If they are, the "relative position of each packet associated with a particular program remains the same with respect to the other packets **within the program**, as taught by Bertram—paragraph 0025, lines 5-7" (Ans. 18). Therefore the Examiner finds the combination of Bertram and Bauchot is proper and teaches the recited features of claim 12.

Appellants counter the "Examiner cannot read into a simple disclosure of manipulating data units assigned to particular time slots to necessarily require 'identifying time slots identifying time slots [sic] of a television signal assigned to the plurality of first data units in the first data stream…'" (Reply Br. 3). However, we find that the Examiner's combination of Bertram and Bauchot does not need to change the relative positions of the packets in one program, thus meeting the requirements set forth in paragraphs 25 and 38 of Bertram. The packets in Bertram can be shifted left or right. This allows the assignment of packets while not affecting the program since the reassignment would not affect the relative position of the packets in the one program. The combination of Bertram and Bauchot is reasonable since the reassignment would not necessarily change the purpose of Bertram. Further, because neither claim 12 nor claim 24 requires any specific reassignment order or pattern, the combination of Bauchot and

Bertram discloses the invention recited in claims 12 and 24. Thus, because Appellants have not provided evidence of error in the Examiner's position, the rejection of claims 12 and 24 as obvious over the combination of Bertram and Bauchot is sustained.

Claims 15 and 27

Claims 15 and 27 recite a portion of second data units includes a reveal command to command a receiver to display interactive content. Appellants argue (App. Br. 13) that nothing in Bertram teaches or suggests using the "reveal command" for "commanding a receiver to display the interactive content." The Examiner finds the combination of Bertram and Feinleib teaches this claimed limitation (Ans. 19). The Examiner asserts that Bertram discloses a program stream that can be interactively controlled by a user using buttons such as "PLAY," etc., to display the interactive content (Ans. 5; Bertram ¶[0058]) and Feinleib teaches enhancing content is activated by supplemental data (Ans. 6; Feinleib col. 12, ll. 44-45).

We agree with the Examiner's findings above and the reasoning that it would have been obvious to a skilled artisan at the time of the invention to modify Bertram's system to include a reveal command in a first program stream of Feinleib for activating the interactive content of the program (Ans. 6). Thus, because Appellants have not provided evidence of error in the Examiner's position, the rejection of claims 15 and 27 as obvious over the combination of Bertram, Bauchot, and Feinleib is sustained.

Claims 13-14, 16, 25, 26, and 28

With respect to claims 13-14, 16, 25, 26, and 28, Appellants argued (App. Br. 11) their patentability is merely based on their dependence from claims 12 and 24 and the arguments made with respect to these base claims,

which were found to be unpersuasive. Therefore, claims 13-14, 16, 25, 26, and 28 fall with claims 12 and 24.

<div align="center">CONCLUSION</div>

Appellants have shown the Examiner erred in rejecting claims 1-11 and 17-23 under 35 U.S.C. § 103(a).

Appellants have not shown the Examiner erred in rejecting claims 12-16 and 24-28 under 35 U.S.C. § 103(a).

<div align="center">DECISION</div>

The Examiner's decision in rejecting claims 1-11 and 17-23 is reversed.

The Examiner's decision in rejecting claims 12-16 and 24-28 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

<div align="center">AFFIRMED-IN-PART</div>

gvw

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